

KEY AND DIAGNOSES FOR THE GENERA OF  
'BROADHEADED' DISCOCEPHALINES  
(HEMIPTERA: PENTATOMIDAE)

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*Abstract.*—A key and diagnoses are given for the 14 genera of the tribe Discocephalini that have the interocular width equal to or greater than the length of the head, the basal segment of the rostrum reaching onto the prosternum, and the base of the abdominal venter unarmed. The genus *Beroaldus* Distant, 1890, is recognized as a junior synonym of *Phoecia* Stål, 1862. The male of *Placidocoris bivittatus* Ruckes, previously known only from the female holotype, is described.

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There are 14 genera in the tribe Discocephalini that have the interocular width equal to or greater than the length of the head, the basal segment of the rostrum projecting onto the prosternum and the base of the abdominal venter unarmed. These 'broadheaded' discocephalines have no formal name, and not all of the genera are closely related. Most of them have a similar, easily recognized facies. Among them are some of the most common and several of the rarest of the discocephalines. Two other discocephaline genera, *Parvamima* Ruckes and *Dryptocephala* Laporte, also have the interocular width equal to or greater than the length of the head, but they differ vastly from each other and from the 'broadheaded' genera. *Parvamima* has the metasternum strongly produced and excavated posteriorly in apposition to a stout, medial tubercle at the base of the abdominal venter. *Dryptocephala* has a relatively

short rostrum, the basal segment reaching only to the anterior margin of the prosternum, and a strongly explanate pronotum. The interocular width of *Phineus* Stål is usually somewhat less than the length of the head, but the two dimensions are equal in an occasional specimen. However, the base of the abdominal venter is clearly armed in *Phineus*.

Becker (1977) enumerated all the genera of 'broadheaded' discocephalines save *Placidocoris* Ruckes in a review of the genus *Colpocarena* Stål. Earlier, a key to half of these genera was given by Ruckes (1966) in a paper dealing mostly with those species that Kirkaldy (1909) had cataloged under *Platycarenum* Fieber or as "species of doubtful position." However, there has been no key to all the genera of 'broadheaded' discocephalines or, for that matter, to the other, more numerous genera of discocephalines. Consequently, placing discocephaline specimens to genus often has been frustrating, and the relatively few modern reviews and revisions of discocephaline genera are not as useful as they would be were the genera keyed.

The ratios given in the key and diagnoses should not be interpreted rigidly. Although a range is given for each ratio when possible, not all species were seen, and some species were represented by only one or a few specimens. Spiracles are present and usually apparent on the 8th paratergites. Mention is made of these spiracles only when they are concealed.

KEY TO GENERA OF 'BROADHEADED' DISCOCEPHALINES

- 1. Longitudinal median of mesosternum sulcate and densely punctate, most adjacent punctures in sulcus separated by distance less than diameter of one puncture . . . 2
  - Longitudinal median of mesosternum impunctate or sparingly punctate, asulcate or sulcate . . . . . 3
- 2(1). Tumid portion of mesosternum on each side of medial sulcus densely punctate; ostiolar ruga on each side reaching 0.3 distance from mesial limit of ostiole to lateral margin of metapleuron . . . . . *Platycarenum* Fieber
  - Tumid portion of mesosternum on each side of medial sulcus largely smooth and impunctate; ostiolar ruga on each side reaching 0.5 distance or slightly more from mesial limit of ostiole to lateral margin of metapleuron . . . *Discocephalessa* Kirkaldy
- 3(1). Apex of scutellum reaching to or beyond imaginary line connecting anterolateral connexival angles of last abdominal segment (Fig. 12) . . . . . 4
  - Apex of scutellum not reaching such a line . . . . . 6
- 4(3). Length of head 0.6 or less of interocular width; anterior margin of last abdominal sternite in male right-angular medially (Fig. 33) . . . (part) . . . *Discocephala* Laporte
  - Length of head more than 0.6 of interocular width; if nearly 0.6 of interocular width then length of head 0.9-1.1 of medial pronotal length; anterior margin of last abdominal sternite in male arcuate (Figs. 13, 15) . . . . . 5
- 5(4). Distance between eye and ocellus on each side less than 0.75 distance between ocelli; length of head 0.7 or less of medial length of pronotum; antennae 4-segmented . . . . . *Phoecacia* Stål
  - Distance between eye and ocellus on each side subequal to distance between ocelli; length of head and medial length of pronotum subequal; antennae 5-segmented . . . . . *Ischnopelta* Stål
- 6(4). Width of head across eyes about 1.33 times basal width of scutellum . . . . . 7
  - Width of head across eyes not more than about 1.25 times basal width of scutellum . . . . . 8
- 7(6). Lateral margins of juga deeply concave before eyes (Fig. 17) . . . . . *Colpocarena* Stål

- Lateral margins of juga not at all concave before eyes (Fig. 21) ..... *Tetragonotum* Ruckes
- 8(6). Distance from ocellus to nearest eye 0.70 or more of distance between ocelli ... 9
- Distance from ocellus to nearest eye less than 0.70 of distance between ocelli ... 13
- 9(8). Large, acute, anteocular process present on lateral margin of each jugum (Fig. 23) ..... *Harzogaster* Kormilev
- Anteocular process absent or small and obtuse ..... 10
- 10(9). Length of head more than 0.85 of interocular width ..... *Placidocoris* Ruckes
- Length of head less than 0.75 of interocular width ..... 11
- 11(10). Metasternum flat or shallowly concave; anterior margin of sternite 6 in male obtusely produced (Fig. 33) (part) ..... *Discocephala* Laporte
- At least posterior part of metasternum sulcate medially; anterior margin of sternite 6 in male acutely produced (Fig. 37) ..... 12
- 12(11). Metasternum sulcate medially for entire length ..... *Alveostethus* Ruckes
- Metasternum medially carinate anteriorly, sulcate posteriorly ... *Acclivilamna* Ruckes
- 13(8). Stout, bent, anteapical process present on inferior surface of each hind femur of males, sometimes reduced in females (Fig. 48); apex of scutellum in form of Gothic arch (Fig. 50) ..... *Uncicrus* Ruckes
- Hind femora unarmed; apex of scutellum rounded ..... 14
- 14(13). Ostiolar ruga on each side extending about 0.5 of distance from mesial limit of ostiole to lateral margin of metapleuron ..... *Allinocoris* Ruckes
- Ostiolar ruga on each side extending about 0.75 or more of this distance ..... *Lineostethus* Ruckes

*Platycarenius* Fieber, 1860

Figs. 1-5

*Platycarenius* Fieber, 1860:77; Ruckes, 1966:10, 11-12 (type species *Cydnus umbraculatus* Fabricius, 1803, by monotypy).

*Head.* Length of head 0.65-0.78 interocular width, 1.00-1.14 times medial length of pronotum. Distance between ocelli 0.31-0.34 interocular width, from each ocellus to nearest eye 0.93-1.07 distance between ocelli. Width of head across eyes 1.22-1.33 times basal width of scutellum. Lateral margin of each jugum with deep concavity creating anteocular lobe (Fig. 1). Antennae 5-segmented. Bucculae weakly produced, widely divergent posteriorly, not reaching base of head.

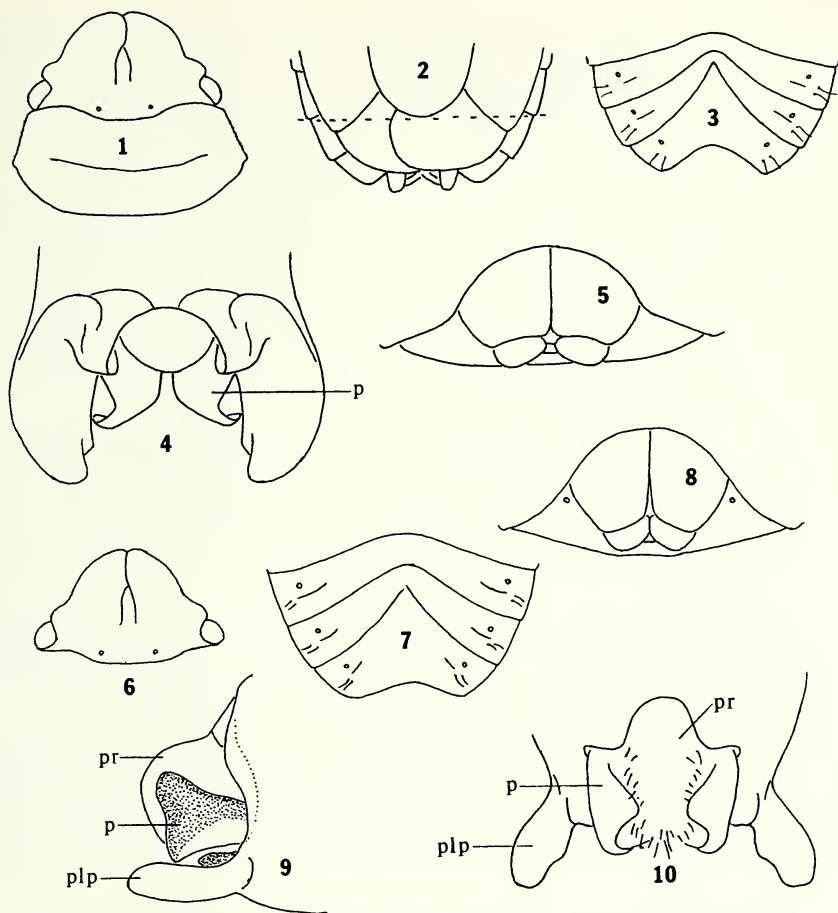
*Thorax.* Apex of scutellum reaching imaginary line connecting anterolateral connexival angles of penultimate abdominal segment (Fig. 2). Costal angles of coria reaching middle of penultimate connexiva. Mesosternum medially sulcate, moderately tumescent one each side. Metasternum somewhat produced ventrad, medially sulcate. All thoracic sterna including tumescent areas of mesosternum densely punctate. Ostiolar ruga on each side straight, spatulate, extending 0.3 distance from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Anterior margin of sternite 7 in male acutely produced medially, that of sternite 6 arcuately produced (Fig. 3); length of sternite 5 medially 0.40-0.50 lateral length; medial length of sternites 6+7 comprising 0.54-0.58 medial length of abdominal venter. Parameres depressed, curving ventrad apically (Fig. 4). Spiracles on paratergites 8 covered by basal plates (Fig. 5).

*Species.* Monotypic.

*Remarks.* Ruckes (1966:12-13) redescribed the type species.

The only other genus of 'broadheaded,' discocephalines with a densely punctate



Figs. 1-5. *Platycarenius umbraculatus*. 1. Head and pronotum. 2. Relationship of scutellar apex and abdominal segments. 3. Sternites 5-7 of male. 4. Genital cup. 5. Genital plates. 6-10. *Discocephalessa humilis* complex. 6. Head. 7. Sternites 5-7 of male. 8. Genital plates. 9. Distal part of pygophore, lateral view. 10. Same, dorsal view. Symbols: p, paramere; plp, posterolateral projection of ventral margin; pr, proctiger.

mesosternum is *Discocephalessa*. Differences between these genera include the ratio of head width to scutellar width, length of ostiolar rugae, type of parameres and structure of the pygophore.

*Discocephalessa* Kirkaldy, 1909

Figs. 6-10

*Platycarenius* subgenus *Discocephalessa* Kirkaldy, 1909:215 (type species *Discocephalessa notulata* Stål, 1862, by original designation).

*Discocephalessa*: Ruckes, 1966:10, 13-14.



*Head.* Length of head 0.75–0.85 interocular width, 0.94–1.06 medial length of pronotum. Distance between ocelli 0.34–0.40 interocular width. Distance from each ocellus to nearest eye 0.72–0.93 distance between ocelli. Width of head across eyes 1.00–1.11 times basal width of scutellum. Lateral margins of juga moderately concave before eyes (Fig. 6). Antennae 5-segmented. Bucculae weakly developed anteriorly, moderately so posteriorly, diverging at labium, reaching base of head.

*Thorax.* Scutellum approaching imaginary line connecting anterolateral connexival angles of penultimate abdominal segment. Costal angles of coria surpassing scutellum, resting above connexiva near suture between last and penultimate abdominal segments. Mesosternum and metasternum longitudinally sulcate. Prosternum and mesosternal sulcus densely punctate; tumescent portion of mesosternum on each side of sulcus sparsely punctate or impunctate. Each ostiolar ruga curving slightly cephalad, reaching about one-half to two-thirds of distance from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Anterior margin of sternite 7 acutely produced medially in male, that of sternite 6 arcuately produced (Fig. 7); length of sternite 5 medially 0.40–0.55 lateral length; length of sternites 6 + 7 medially 0.56–0.62 medial length of abdominal venter. Posterolateral projections of pygophore separated from margin by sutures and membranes (Figs. 9, 10). Parameres somewhat compressed with compact, complex head.

*Species.* *andina* (Breddin, 1904), *humilis* (Herrich-Schäffer, 1843), *notulata* (Stål, 1962), *sordida* (Walker, 1867) and *terminalis* (Walker, 1867).

*Remarks.* Ruckes (1866:14–22) redescribed the above species with the exception of *humilis* of whose identity he was uncertain. He observed that *humilis* is applied to a complex containing 12 distinctly different patterns of parameres.

Some differences between *Discocephalessa* and *Platycarenum*, the only genera of 'broadheaded' discocephalines with densely punctate mesosternum, were mentioned previously. A remarkable feature of *Discocephalessa*, a feature found elsewhere among the 'broadheaded' discocephalines in the genera *Placidocoris* and *Uncicrus*, is the partial separation of the posterolateral pygophoral projections by sutures and membranes.

#### *Phoeacia* Stål, 1862

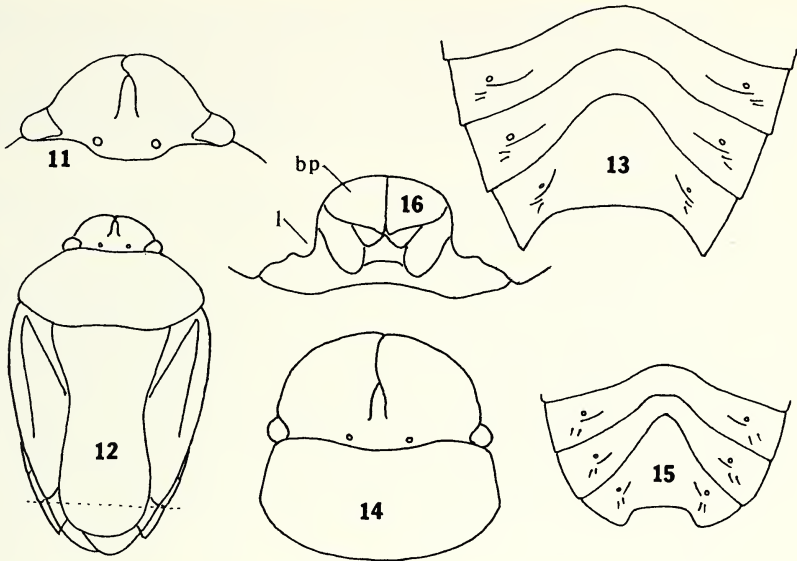
Figs. 11–13

*Phoeacia* Stål, 1862:97 (type species *Discocephala lineaticeps* Stål, 1860, by original designation).

*Beroaldus* Distant, 1890:322 (type species *Beroaldus erubescens* Distant, 1890, by monotypy). NEW SYNONYMY.

*Head.* Length of head 0.72–0.88 interocular width, 0.56–0.70 medial length of pronotum. Distance between ocelli 0.35–0.42 interocular width, from each ocellus to nearest eye 0.50–0.69 distance between ocelli. Width of head across eyes 0.86–0.97 basal width of scutellum. Head before eyes smoothly arcuate (Fig. 11). Antennae 4-segmented. Bucculae weakly produced anteriorly, moderately so where diverging around base of labium, reaching base of head.

*Thorax.* Scutellum extending to apex of abdomen or nearly so, approaching to surpassing imaginary line connecting posterolateral connexival angles of last abdominal segment (Fig. 12). Costal angles of coria projecting over anterolateral connexival angles of last abdominal segment but not attaining apex of scutellum. Scutellum



Figs. 11–13. *Phoeacia gibba*. 11. Head. 12. Habitus. 13. Sternites 5–7 of male. 14–16. *Ischnopelta* sp. 14. Head and pronotum. 15. Sternites 5–7 of male. 16. Genital plates. Symbols: bp, basal plate; l, lobe.

slightly constricted in width at distal ends of frena. Mesosternum moderately tumescent; very shallow, impunctate sulcus bordered on each side by thin line of short hairs. Metasternum nearly flat to shallowly sulcate medially. Ostiolar ruga on each side extending 0.75 distance from mesial limit of ostiole to lateral margin of meta-pleuron.

*Abdomen.* Medial length of sternite 5 in male 0.50–0.75 lateral length; anterior margins of sternites 6 and 7 arcuately produced medially, medial length of both combined 0.44–0.60 medial length of abdominal venter (Fig. 13). Parameres usually substyliform and largely concealed between ventral pygophoral margin and proctiger, but sometimes expanded, depressed and curved ventrad apically, and more or less fully visible from dorsal view when pygophore is extracted.

*Species.* Nominal species are *erubescens* (Distant, 1890), *gibba* (Fieber, 1851) and *lineaticeps* Stål, 1860.

*Remarks.* *Phoeacia*, *Ischnopelta* and *Discocephala* (in part) are the only genera of 'broadheaded' discocephalines in which the scutellum reaches nearly to the apex of the abdomen, and only *Phoeacia* has 4-segmented antennae.

The types of the three nominal species enumerated above were examined.

#### *Ischnopelta* Stål, 1868

Figs. 14–16

*Discocephala* subgenus *Ischnopelta* Stål, 1868:18 (type species *Discocephala scutellata* Signoret, 1851, fixed by Kirkaldy, 1909).

*Ischnopelta*: Kirkaldy, 1909:XXXIII.

*Head.* Length of head 0.58–0.75 interocular width, 0.93–1.11 medial length of pronotum. Distance between ocelli 0.30–0.33 interocular width, from each ocellus to nearest eye 0.88–1.00 distance between ocelli. Width of head across eyes 1.24–1.39 times basal width of scutellum. Lateral jugal margins slightly sinuous before eyes (Fig. 14). Antennae 5-segmented. Bucculae weakly produced, widely separated at labium, reaching base of head.

*Thorax.* Scutellum extending nearly to apex of abdomen, surpassing imaginary line connecting anterolateral connexival angles of last abdominal segment. Costal angles of coria touching this line. Mesosternum tumescent, without carina, with medial depression anteriorly, impunctate. Metasternum slightly concave, margins adjacent to coxae thickened. Ostiolar ruga on each side curving cephalad, extending about 0.6 distant from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Medial length of sternite 5 in males 0.45–0.60 length at lateral margins; medial length of sternites 6+7 about 0.56 medial length of abdominal venter; anterior margin of each of these sternites arcuately produced medially (Fig. 15). Parameres palmate, forming a sort of cup covered by proctiger. Posterior margin of last sternite of female with small lobe on each side covering spiracles on paratergites 8 (Fig. 16).

*Species.* *oblonga* (Fieber, 1851) and *scutellata* (Signoret, 1851).

*Colpocarena* Stål, 1868

Figs. 17–20

*Discocephala* subgenus *Colpocarena* Stål, 1868:17 (type species *Sciocoris complanatus* Burmeister, 1835, by monotypy).

*Colpocarena:* Kirkaldy, 1909:215; Becker, 1977:368–369.

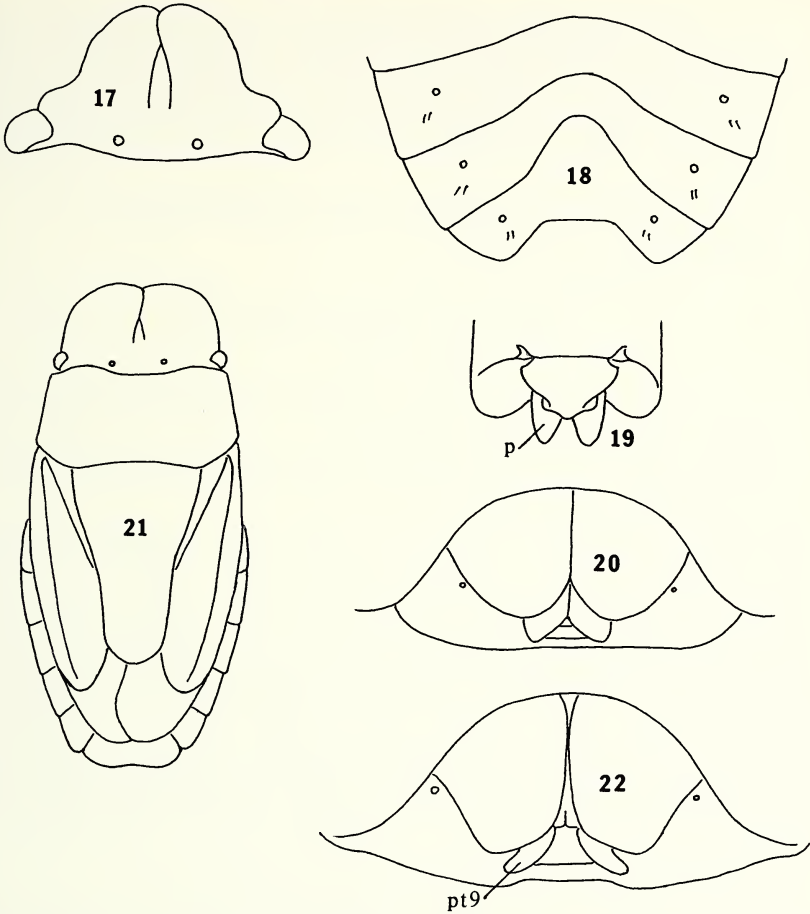
*Head.* Length of head 0.73 interocular width, subequal to length of pronotum. Distance between ocelli 0.32–0.35 interocular width, from each ocellus to nearest eye 0.81–0.89 distance between ocelli. Width of head across eyes 1.34–1.36 times basal width of scutellum. Lateral margins of juga strongly concave before anteocular convexity at each eye (Fig. 17). Antennae 5-segmented. Bucculae scarcely produced, widely separated posteriorly, nearly reaching base of head.

*Thorax.* Pronotum transversely depressed behind cicatrices. Scutellum approaching imaginary line connecting anterolateral connexival angles of penultimate abdominal segment. Costal angles of coria exceeding this line, lying over connexiva of last abdominal segment. Mesosternum moderately tumescent, neither sulcate nor carinate, impunctate; xyphus slightly concave. Metasternum weakly concave, margins adjacent to coxae thickened. Ostiolar ruga on each side extending 0.8 distance from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Medial length of sternite 5 in male 0.62 length of lateral margins; medial length of sternites 6+7 about 0.45 medial length of abdominal venter; anterior margins of sternites 6 and 7 arcuately produced (Fig. 18). Parameres projecting posterodorsad, curving slightly ventrad toward apex, depressed, concave ventrally, convex dorsally (Fig. 19).

*Species.* Monotypic.

*Remarks.* Becker (1977) provided a detailed redescription of the genus and type species.



Figs. 17–20. *Colpocarena complanata*. 17. Head. 18. Sternites 5–7 of male. 19. Genital cup. 20. Genital plates. 21, 22. *Tetragonotum megacephalum*. 21. Habitus. 22. Genital plates. Symbols: p, paramere; pt 9, paratergite 9.

*Tetragonotum* Ruckes, 1965

Figs. 21, 22

*Tetragonotum* Ruckes, 1965:117 (type species *Tetragonotum megacephalum* Ruckes, 1965, by original designation).

*Head.* Length of head 0.71 interocular width, 1.11 medial length of pronotum. Distance between ocelli 0.33 interocular width, from each ocellus to nearest eye 0.93 of distance between ocelli. Width of head across eyes about 1.29 times basal width of scutellum. Head subrectangular with broadly rounded anterolateral margins (Fig. 21). Bucculae weakly produced, diverging posteriorly, not reaching base of head.

*Thorax.* Scutellum not reaching imaginary line connecting anterolateral angles of



penultimate connexival segments, exceeding such a line connecting preceding connexival segments. Costal angles of coria surpassing scutellar apex, lying above penultimate tergite near posterior margin. Mesosternum bilaterally tumescent, impunctate, shallowly sulcate medially. Metasternum apparently hexagonal, nearly flat. Each ostiolar ruga nearly straight, reaching about two-thirds of distance from mesial margin of ostiole to lateral margin of metapleuron; ostiole nearly at right angle to surface of metapleuron.

*Abdomen.* Male unknown. Paratergites 9 small, divergent (Fig. 22).

*Species.* Monotypic.

*Remarks.* Known only from holotype.

*Harpogaster* Kormilev, 1957

Figs. 23–25

*Harpogaster* Kormilev, 1957:48–50; Pirán, 1962:8–9 (type species *Harpogaster wilineri* Kormilev, 1957, by original designation).

*Dentocephala* Ruckes, 1960:1–3 (type species *Dentocephala parva* Ruckes, 1960, by original designation) (synonymized by Pirán, 1962).

*Head.* Length of head 0.85 interocular width, equal to medial length of pronotum. Distance between ocelli 0.38 interocular width, from each ocellus to nearest eye subequal to distance between ocelli. Width of head across eyes subequal to basal width of scutellum. Antecular process stout, acute (Fig. 23). Antennae 5-segmented. Bucculae weakly, uniformly produced, diverging at labium, reaching base of head.

*Thorax.* Scutellum approaching imaginary line connecting anterolateral connexival angles of abdominal segment 5. Costal angles of coria lying above connexiva of penultimate abdominal segment. Both mesosternum and metasternum medially sulcate; sulci impunctate; mesosternum slightly tumescent on each side of sulcus, sparingly punctate. Each ostiolar ruga curving cephalad, extending slightly more than one-half distance from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Anterior margin of sternite 7 in male acutely produced medially, that of sternite 6 right angular medially (Fig. 24). Medial length of sternite 5 in male 0.40 length of lateral margins; medial length of sternites 6+7 about 0.50 medial length of abdominal venter. Parameres expanded, depressed, curved ventrad apically (Fig. 25).

*Species.* Monotypic.

*Remarks.* The large, antecular processes are diagnostic among the genera of 'broadheaded' discocephalines. The pygophore of the type species is peculiar in having the dorsal margin above each paramere projecting as a thin, foliate process (Fig. 25).

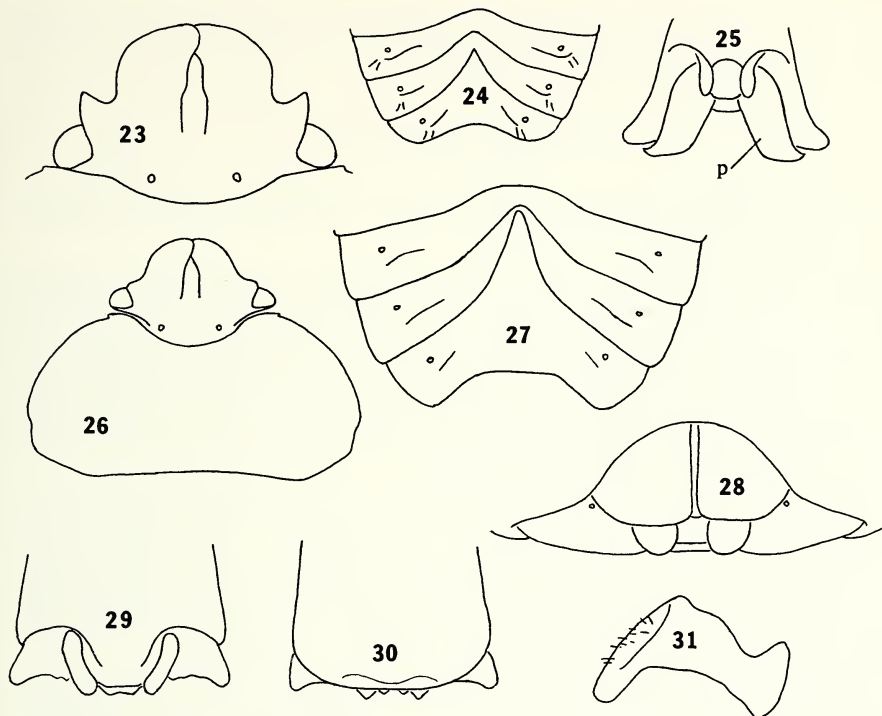
Only the holotype of *Dentocephala parva* was examined.

*Placidocoris* Ruckes, 1965

Figs. 26–31

*Placidocoris* Ruckes, 1965:114–116 (type species *Placidocoris bivittatus* Ruckes, 1965, by original designation).

*Head.* Length of head 0.88–0.94 interocular width, 0.80–0.89 medial length of pronotum. Distance between ocelli 0.36–0.42 interocular width, from each ocellus to nearest eye 0.70–0.80 distance between ocelli. Width of head across eyes 0.77–



Figs. 23–25. *Harpogaster willineri*. 23. Head. 24. Sternites 5–7 of male. 25. Genital cup. 26–31. *Placidocoris bivittatus*. 26. Head and pronotum. 27. Sternites 5–7 of male. 28. Genital plates. 29. Genital cup. 30. Distal part of pygophore, ventral view. 31. Paramere. Symbols: p, paramere.

0.90 basal width of scutellum. Lateral margins of juga sinuous, strongly concave before eyes (Fig. 26). Antennae 5-segmented. Bucculae not attaining base of head, produced more strongly posteriorly than anteriorly, diverging around base of labium.

*Thorax.* Anterolateral margins of pronotum strongly convex from dorsal view. Scutellum reaching well past imaginary line connecting anterolateral connexival angle of 5th abdominal segment. Costal angles of coria reaching beyond similar line drawn across anterolateral connexival angles of penultimate abdominal segment. Mesosternum tumescent on each side of medial sulcus which contains a few punctures. Metasternal sulcus an elongated pentagon. Ostiolar ruga on each side stoutly produced, reaching 0.6 distance from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Anterior margins of sternites 6 and 7 acutely produced medially in male, sternite 7 nearly dividing sternite 6 (Fig. 27); medial length of sternites 6+7 about 0.60–0.66 medial length of abdominal venter; length of sternite 5 reduced medially to 0.25–0.28 lateral length. Posterolateral pygophoral projections stubby, separated by sutures and membranes from remainder of pygophore (Figs. 29, 30). Visible part of parameres subcylindrical, inclined ventrad. Excised paramere L-shaped (Fig. 31).

*Species.* Monotypic.

*Remarks.* *Placidocoris bivittatus* was described from a single female, which was examined. The distal portion of the pygophore and a paramere of the previously unknown male are figured here (Figs. 29–31).

*Discocephala* Laporte, 1832

Figs. 32–35

*Discocephala* Laporte, 1832:55, 57 (type species *Discocephala marmorea* Laporte, 1832, by monotypy).

*Head.* Length of head 0.52–0.60 interocular width, 0.76–0.89 medial length of pronotum. Distance between ocelli 0.31–0.35 interocular width, from each ocellus to nearest eye 0.84–1.00 distance between ocelli. Width of head across eyes 1.12–1.24 time basal width of scutellum. Lateral margins of juga almost evenly arcuate, very shallowly emarginated before eyes (Fig. 32). Antennae 5-segmented. Bucculae weakly produced but well defined, slightly constricted before labium, then separating widely at labium, not reaching base of head.

*Thorax.* Apex of scutellum surpassing imaginary line connecting anterolateral connexival angles of penultimate abdominal segment but not reaching such a line connecting posterolateral connexival angles of same segment. Costal angles of coria reaching connexiva of last abdominal segment. Mesosternum tumescent, neither clearly sulcate nor carinate; xyphus flat. Metasternum flat or weakly concave. Ostiolar ruga on each side curving cephalad, distally truncate, reaching little more than 0.6 distance from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Medial length of sternite 5 in male 0.57 lateral length; medial length of sternites 6+7 about 0.56 medial length of abdominal venter; anterior margin of sternite 7 nearly right angular medially, that of sternite 6 arcuate (Fig. 33). Portion of parameres within genital cup roughly cylindrical, directed posteriorly (Fig. 34).

*Species.* *deplanata* Walker, 1867, *luteicornis* Walker, 1867, and *marmorea* Laporte, 1832.

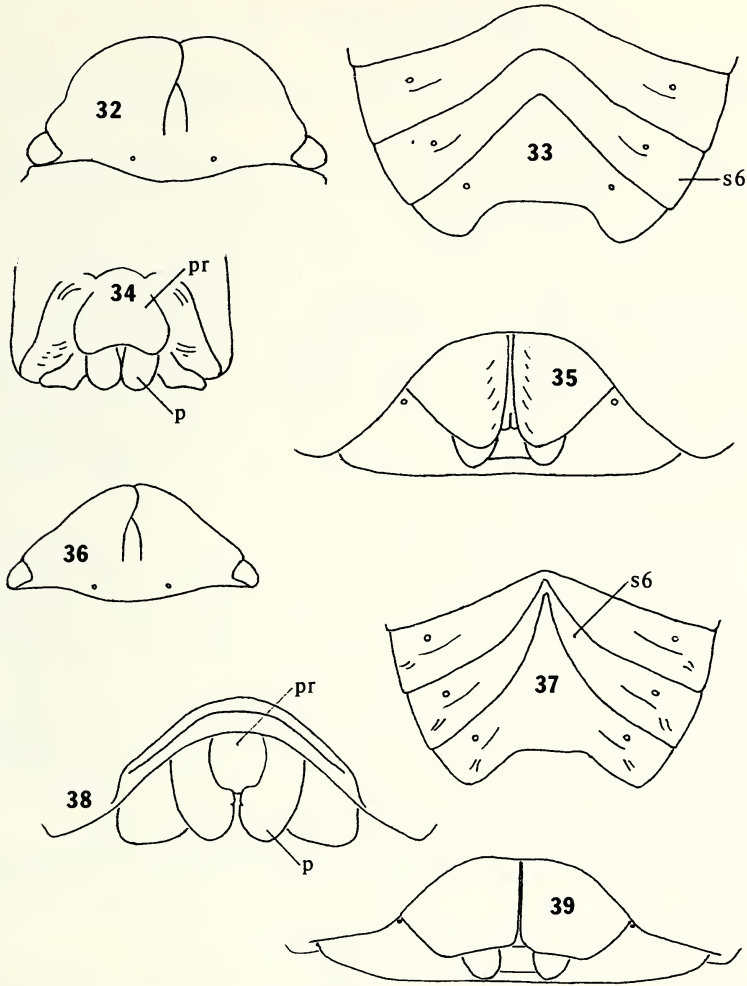
*Alveostethus* Ruckes, 1966

Figs. 36–39

*Alveostethus* Ruckes, 1966:10, 31–33 (type species *Discocephala latifrons* Dallas, 1851, by original designation).

*Head.* Length of head 0.51–0.82 interocular width, 0.66–0.86 medial length of pronotum. Distance between ocelli 0.31–0.39 interocular width, from each ocellus to nearest eye 0.69–1.00 distance between ocelli. Width of head across eyes 0.89–1.10 basal width of scutellum. Lateral margins of head slightly sinuous (Fig. 36). Antennae 5-segmented. Bucculae scarcely developed except at base of head.

*Thorax.* Scutellum approaching imaginary line connecting anterolateral connexival angles of penultimate abdominal segment. Costal angles of coria reaching such a line connecting anteromedial connexival angles of last abdominal segment. Mesosternum tumescent, weakly carinate at anterior and posterior extremities, impunctate. Metasternum moderately produced, acute anteriorly, narrowly truncate posteriorly, deep medial sulcus open posteriorly, with ramus on each side between mesocoxa and metacoxa. Ostiolar ruga on each side reaching 0.6–0.7 distance from mesial limit of ostiole to lateral margin of metapleuron.



Figs. 32–35. *Discocephala* sp. 32. Head. 33. Sternites 5–7 of male. 34. Genital cup. 35. Genital plates. 36–39. *Alveostethus politus*. 36. Head. 37. Sternites 5–7 of male. 38. Genital cup and posterior margin of tergite 7. 39. Genital plates. Symbols: p, paramere; pr, proctiger; s6, sternite 6.

*Abdomen.* Sternite 3 (2nd visible) subtuberculate mesially. Anterior margin of both sternites 6 and 7 acute medially in male; sternite 7 nearly dividing 6, and 6 reducing medial length of 5 to 0.20–0.30 length of lateral margins (Fig. 37); length of sternites 6+7 comprise 0.60–0.68 length of abdominal venter along median. Parameres stout, somewhat depressed (Fig. 38).

*Species.* *latifrons* (Dallas, 1851), *politus* (Signoret, 1851), *pseudopolitus* (Ruckes, 1957) and *rugulosus* (Fieber, 1851)

*Remarks.* Ruckes (1966:32–38) keyed and redescribed the species.



*Acclivilamna* Ruckes, 1966

Figs. 40–46

*Acclivilamna* Ruckes, 1966:11, 39–49 (type species *Discocephala vicina* Signoret, 1851, by original designation).

*Head.* Length of head 0.67–0.70 interocular width, 0.92–1.00 median length of pronotum. Distance between ocelli 0.31–0.34 interocular width. Distance from each ocellus to nearest eye 0.94–1.00 distance between ocelli. Width of head across eyes 1.08–1.18 times basal width of scutellum. Lateral margins of juga sinuous, with at most a weak obtuse process before each eye (Fig. 40). Antennae 5-segmented. Bucculae weakly developed, diverging around labium, reaching base of head.

*Thorax.* Apex of scutellum on or near imaginary line connecting anterolateral connexival angles of penultimate abdominal segment. Costal angles of coria resting above connexiva of last abdominal segment. Mesosternum slightly tumid bilaterally, weakly sulcate medially; xyphus nearly flat. Metasternum with thin, strong, medial carina anteriorly and deep, fusiform sulcus posteriorly. Each ostiolar ruga curving slightly cephalad, lanceolate, apically acute, covering about 0.67 distance from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Medial length of sternite 5 in male about 0.18 length of lateral margins (Fig. 41); medial length of sternites 6+7 about 0.71 medial length of abdominal venter; anterior margin of each of last two sternites acutely produced. Parameres robust, cylindrical, projecting posteriorly, heavily sclerotized laterally and dorsally (Fig. 44). Spiracles on paratergites 8 concealed by basal plates (Figs. 45, 46).

*Species.* Monotypic.

*Remarks.* The synonymy of the type species is as follows:

*Acclivilamna vicina* (Signoret, 1851).

*Discocephala vicina* Signoret 1851:332–333.

*Discocephala caenosa* Stål, 1860:15 (synonymized by Stål, 1868).

*Discocephala (Platycarenum) vicina*: Stål, 1868:18.

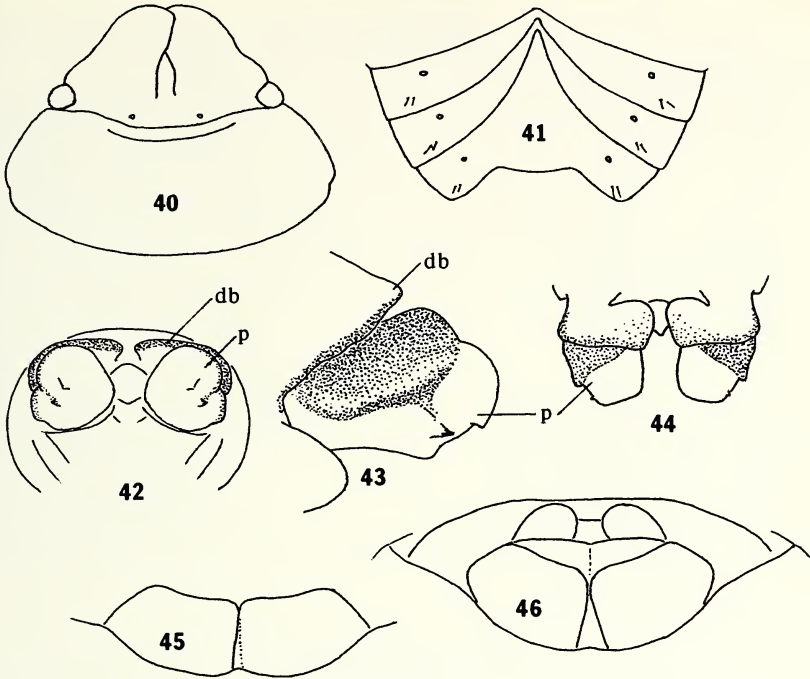
*Platycarenum (Discocephalessa) kormilevi* Ruckes, 1958:4–7 (synonymized by Ruckes, 1966).

*Accivilamna vicina*: Rucke, 1966:40–41, figs. 5, 21, 22, 27.

I examined the type (female) of *Discocephala vicina* Signoret, which is in the Naturhistorisches Museum Wien under the synonym *Platycarenum vicina*, the type (male) of *Discocephala caenosa* Stål, which is in the Naturhistoriska Riksmuseet, the holotype (male) and allotype of *Platycarenum kormilevi* Ruckes, which are in the American Museum of Natural History. All of these specimens apparently are examples of a single species.

The outline of the lateral margin of the head, pronotum and base of the hemelytron of *A. vicina* published by Ruckes (1966, fig. 27) was probably drawn from the holotype of *P. kormilevi*. It is misleading in that the anteoconal convexity is exaggerated as a small process. It does appear, however, that the species is sexually dimorphic with a more pronounced sinuosity of the jugal margins in the male than in the female.

The genital plates distad of the basal plates in the type of *D. vicina* are displaced and partially obscured by the protrusion of a curved, cylindrical structure presumed to be the anal tube. The basal plates are outlined in Figure 45. In the allotype of *P.*



Figs. 40–44. *Acclivilamna* (*Discocephala caenosa*, type). 40. Head and pronotum. 41. Sternum 5–7 of male. 42. Pygophore, caudal view. 43. Distal part of pygophore, lateral view. 44. Same, ventral view. 45. Basal plates (*Discocephala vicina*, type). 46. Genital plates (*Platycaremus kormilevi*, allotype). Symbols: db, dorsal border; p, paramere; pr, proctiger.

*kormilevi* the genital plates appear to be positioned normally except that both basal plates are rotated (Fig. 46).

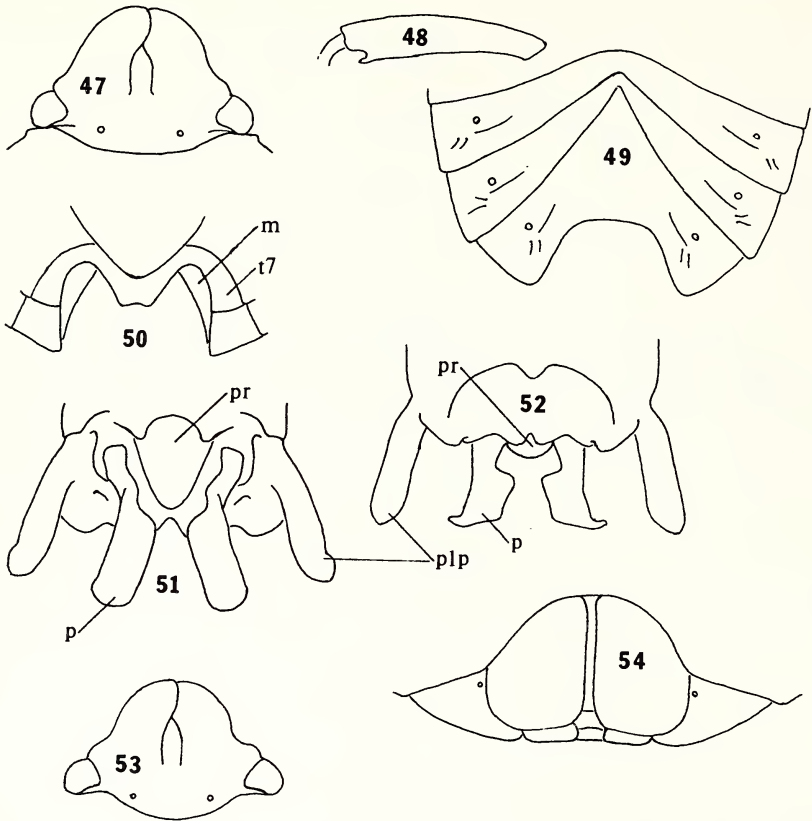
*Uncicrus* Ruckes, 1966

Figs. 47–52

*Uncicrus* Ruckes, 1966:10, 26–27 (type species *Discocephala kollarii* Fieber, 1851, by original designation).

*Head.* Length of head 0.95 interocular width, 0.84 medial length of pronotum. Distance between ocelli 0.48 interocular width, from each ocellus to nearest eye 0.48 distance between ocelli. Width of head across eyes 0.87 basal width of scutellum. Jugal margins moderately concave before eyes (Fig. 45). Antennae 5-segmented. Bucculae moderately and uniformly produced, diverging posteriorly, not attaining base of head.

*Thorax.* Scutellum approaching imaginary line connecting anterolateral connexival angles of last abdominal segment. Costal angles of coria extending little past apex of scutellum. Mesosternum sulcate medially, with a few punctures in sulcus; xyphus carinate medially. Metasternum weakly sulcate medially. Ostiolar ruga on each side



Figs. 47-52. *Uncicrus kollarii*. 47. Head. 48. Hind femur. 49. Sternites 5-7 of male. 50. Tergite 7. 51. Genital cup. 52. Distal part of pygophore, ventral view. 53, 54. *Allinocoris nubila*. 53. Head. 54. Genital plates. Symbols: m, membrane; p, paramere; plp, posterolateral pygophoral projection; pr, proctiger; s, scutellum; t7, tergite 7.

extending 0.6 distance from mesial limit of ostiole to lateral margin of metapleuron. Hind femora of male each armed subapically with large hook on inferior surface (Fig. 48); this projection reduced in female (see Ruckes, 1966).

*Abdomen.* Anterior margins of sternites 6 and 7 acutely produced medially in male (Fig. 49); medial length of both combined about 0.60 medial length of abdominal venter; medial length of sternite 5 about 0.25 lateral length. Posterior margin of tergite 7 in male deeply emarginate with large, medial projection (Fig. 50). Posterolateral pygophoral projections separated from remainder of pygophore by sutures and membranes (Figs. 51, 52). Parameres expanded, depressed and curved ventrally toward apices.

*Species.* Monotypic.

*Remarks.* The form of the posterior margin of tergite 7 in the male and the femoral armament are unique among the 'broadheaded' discocephalines. Tergite 7 is like that of *Antiteuchus*, one of the most common 'longheaded' discocephalines.

A single male of this genus was examined.

Table 1. Comparison of *U. kollarii* and *A. nubilus*.

Criterion	<i>kollarii</i>	<i>nubilus</i>
Length of head : interocular width	0.95	0.93
Length of head : medial length of pronotum	0.84	0.87
Length of head : width of head	0.64	0.62
Width of head : basal width of scutellum	0.87	0.94
Distance between ocelli : interocular width	0.48	0.49
Distance from ocellus to eye : distance between ocelli	0.48	0.48
Medial length of pronotum : pronotal width	0.42	0.42
Basal width scutellum : scutellar length	0.73	0.77
Length (mm) antennal segment 1	0.55	0.50
Length (mm) antennal segment 2	0.90	0.80
Length (mm) antennal segment 3	1.20	1.15
Length (mm) antennal segment 4	1.30	1.25
Length (mm) antennal segment 5	1.30	1.30
Length (mm) rostral segment 1	0.9	0.8
Length (mm) rostral segment 2	2.1	1.7
Length (mm) rostral segment 3	0.9	1.0
Length (mm) rostral segment 4	0.8	—

*Allinocoris* Ruckes, 1966

Figs. 53, 54

*Allinocoris* Ruckes, 1966:10, 29 (type species *Discocephala nubila* Dallas, 1851, by original designation).

*Head.* Length of head 0.93 interocular width, 0.87 medial length of pronotum. Distance between ocelli 0.49 interocular width, from each ocellus to nearest eye 0.48 distance between ocelli. Width of head across eyes 0.94 basal width of scutellum. Lateral margins of head rather strongly concave before eyes (Fig. 53). Antennae 5-segmented. Bucculae weakly produced, strongly divergent at labium, reaching base of head.

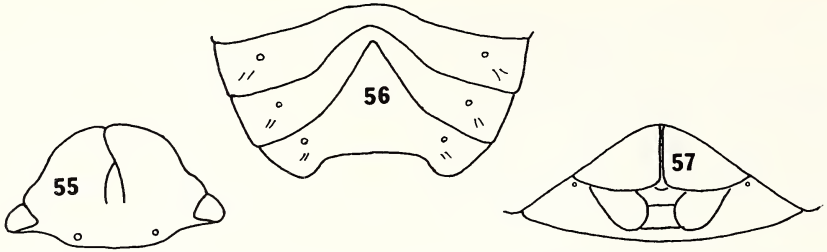
*Thorax.* Scutellum apparently reaching slightly beyond imaginary line connecting anterolateral connexival angles of penultimate abdominal segment (see remarks below). Costal angles of coria surpassing scutellum. Mesosternum moderately tumescent with broad, shallow, sparsely punctate sulcus medially; xyphus flat, weakly carinate. Metasternum flat, weakly carinate medially. Ostiolar ruga on each side reaching one-half distance from mesial limit of ostiole to lateral margin of metapleuron.

*Species.* Monotypic.

*Remarks.* The genus and species are known only from the female holotype. The thorax and abdomen of this specimen were forced apart in pinning, so the relationship between the scutellum and abdomen can only be estimated. The specimen is in such poor condition that remounting to reunite the thorax and abdomen would be very risky.

Ruckes (1966:31) placed *Allinocoris* near *Uncicrus* because the pronotum, mesosternum, metasternum and rostrum of the type species of the two monotypic genera are similar. The similarity extends further (Table 1). From available specimens, the characters separating *Allinocoris* from *Uncicrus* are the absence of an anteapical





Figs. 55-57. *Lineostethus marginellus*. 55. Head. 56. Sternites 5-7 of male. 57. Genital plates.

process on each hind femur and the broadly rounded scutellar apex of *Allinocoris*, which in *Uncicrus* has the shape of a Gothic arch.

*Lineostethus* Ruckes, 1966

Figs. 55-57

*Lineostethus* Ruckes, 1966:10, 10-27; Hildebrand and Becker, 1982:774-775 (type species *Discocephala clypeatus* Stål, 1962, by original designation).

*Head.* Length of head 0.67-0.84 interocular width, 0.80-1.05 length of pronotum. Distance between ocelli 0.40-0.46 interocular width, from each ocellus to nearest eye 0.42-0.65 distance between ocelli. Width of head across eyes 1.03-1.20 times basal width of scutellum. Margins of head before eyes almost evenly arcuate (Fig. 55). Antennae 5-segmented. Bucculae scarcely produced anteriorly, more so posteriorly, diverging at labium, reaching base of head.

*Thorax.* Apex of scutellum reaching imaginary line connecting anterolateral connexival angle of penultimate abdominal segment. Costal angles of coria reaching such a line connecting anterolateral connexival angles of last abdominal segment. Mesosternum sulcate medially, moderately tumescent on each side; sulcus impunctate; xyphus weakly carinate. Metasternum flat with weak medial carina. Ostiolar ruga on each side reaching 0.7-0.8 distance from mesial limit of ostiole to lateral margin of metapleuron.

*Abdomen.* Anterior margin of sternite 7 in male produced and narrowly rounded medially, that of sternite 6 broadly rounded (Fig. 56). Medial length of sternite 5 in male 0.28-0.40 lateral length; medial length of sternites 6+7 combined 0.56-0.60 medial length of abdominal venter. Spiracles on paratergites 8 exposed or covered according to species (Fig. 57).

*Species.* *clypeatus* (Stål, 1862), *graziae* Hildebrand and Becker, 1982, *marginellus* (Stål, 1872) and *tenebricornis* (Ruckes, 1957).

*Remarks.* Hildebrand and Becker (1982) revised the genus, paying particular attention to the genitalia in describing or redescribing the species.

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